Title (en)

METHODS FOR EFFICIENT ORGANIZATION OF VEHICLE PEER GROUPS AND EFFICIENT V2R COMMUNICATIONS

Title (de)

VERFAHREN ZUR EFFIZIENTEN ORGANISIERUNG VON FAHRZEUG-PEER-GRUPPEN UND FÜR EFFIZIENTE V2R-KOMMUNIKATION

Title (fr)

PROCÉDÉS POUR UNE ORGANISATION EFFICACE DE GROUPES D'HOMOLOGUES VÉHICULAIRES ET COMMUNICATIONS V2R EFFICACES

Publication

EP 2283585 B1 20170712 (EN)

Application

EP 09747264 A 20090511

Priority

- US 2009043406 W 20090511
- US 12033008 A 20080514

Abstract (en)

[origin: US2009285197A1] The present invention provides methods for efficient control message distribution in a VANET. Efficient flooding mechanisms are provided to fulfill the objective of flooding (delivering a message to every connected node) with a limited number of re-broadcasting by selected key nodes. A suppression-based efficient flooding mechanism utilizes a Light Suppression (LS) technique to reduce the number of flooding relays by giving up the broadcasting of a flooding message when a node observes downstream relay of the same flooding message. Additionally, a relay-node based efficient flooding mechanism selects Relay Nodes (RN) to form an efficient flooding tree for control message delivery. RNs are nodes that relay at least one control message, for instance a Membership Report (MR) to the upstream node in "k" previous control message cycles. The upstream node may be the group header (GH) for the LPG.

IPC 8 full level

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CPC (source: EP US)

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US10375618B2; CN110446179A; US10524187B2; WO2021000338A1

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